780 CMR Chapter 110 Regulation 3 MANUFACTURED BUILDINGS, BUILDING COMPONENTS AND MOBILE HOMES

(Note: 110.R3 is unique to Massachusetts)

PART I—GENERAL

R3.1 ADMINISTRATION

110.R3. 1.1 Title 1 Title. The BBRS adopts the rules and regulations for manufactured buildings, manufactured building components and manufactured homes contained herein as 780 CMR 110.R3.

110.R3.1.2 Scope. 780 CMR 110.R3 shall govern the design, manufacture, handling, storage, transportation, relocation, and installation of manufactured buildings, manufactured building components, and modular homes, and hereinafter referred to as product, intended for installation in the Commonwealth and/or manufactured in the Commonwealth for shipment to any other statum which such product and the labels thereon are accepted. Subject to local zoning ordinances and by laws, product may be sold for, delivered to, or installed on, building sites located in any location in the Commonwealth if such products have been approved and certified pursuant to 780 CMR 110.R3.

- 1. 110.R3 shall govern the design, manufacture, landling, storage, transportation and in allation of manufactured buildings, and manufactured and day components intended to installation in this State and/or manufactured in this State for shipment to any other standing which such building components, or manufactured homes and the a bels there is are an epted.
- 2. The Federal Manufactured Home Construction and Safety Standards promulgated by the Department of Housing and Urban Development govern the design, panufacture, handling, storage and transportation of manufactured homes for installation in this state.
- 3. Subject to local zoning ordinances and serves, manufactured building components or manufactured homes product may be sold for delivered to, or installed on, building sites located in any jurisdiction of this Save it self-buildings, buildings, buildings components or manufactured homes, products have been approved and as tified plantant to the applicable Codes and 110.R3.

110.R3.1.3 Administration and Enforcement. The BBRS, through its designee the Office, shall administer and enforce the state requirements of 780 CMR 110.R3 and building officials shall administer and enforce the local requirements of 780 CMR 110.R3. The boards which regulate the specialized codes ity of prod ect specific to its specialized code. No person, firm or shall have enforce rental, or sell or rent, any product subject to any provisions of 780 CMR corpo epplicable provisions of 780 CMR 110.R3 The State Enforcement 110.R3 u *gencies* shall have the responsibility for evaluating manufactured and perform ng inspections of manufactured buildings, manufactured building building system duct to orce compliance with 110.R3 and the applicable *codes*. The *State* components, and pr Local Enforcement Agencies shall deem acceptable product, manufactured Enforcement Agencie buildings, manufactured building components, building systems and compliance assurance programs labeled and certified by inspection agencies approved by the Office and those manufactured homes certified as in conformance with the Federal standards by the application of the applicable required HUD label.

Where an uncertified <u>manufactured</u> building was constructed under a manufactured building program of another state and approved under such program, a TPIA shall prepare a report based on review of the plans/<u>drawings</u> and specifications and inspection of the building to assure that said plans/<u>drawings</u> and specifications meet the requirements of 780 CMR 13.00: <u>Energy Efficiency</u> and submit such to the *Office* for review and *approval*.

When the occupancy classification of a relocated *manufactured building* is proposed to be changed, a TPIA shall inspect the *building*, including any disassembly necessary, to determine whether compliance may be achieved for a change of occupancy classification in accordance with the requirements of Chapter 10 of 780 CMR 34.00: *Existing Buildings*. If factory plans are available, then disassembly is not required to the extent that the factory plans can be reasonably verified to reflect the actual construction.

Exception: Relocatable buildings previously approved with a prior Massachusetts insignia may be relocated into or within the state, subject to local approval for the design loads for the location, provided that no plan, specification, reconfiguration, occupancy type or use group changes are made. The insignia numbers, design loads, and plans based on time of manufacture shall be provided to the building official at time of permit application and prior to installation.

110.R3.1.4 Authorization of Third-party Inspections Agencies. The Office may authorize inspection agencies, sometimes referred to as third-party inspection agencies, to perform all or part of the inspections and certification of product, manufactured building and manufactured building systems and quality assurance manual, including to attach the layels the transfer to BBRS may register TPIAs based on recommendations suspend or revoke such a phorization for cause.

110.R3.1.5 Approvals and Compliance. State Forcement agencies may approve but ling systems and quality assurance manuals which comply with the odes, standards, specifications, requirements and 110.R3.

110.R3.1.6 Time of Manufacture. For purpose of 10.R3, product manufactured building, manufactured building component or manufacture. A some is desped to be manufactured at such time as the label as herein described is duly issued by the Office TPIA and the label is attached to it by the TPIA in accordance with the approved compliance a purance program. No product shall be manufactured prior to the Office issuing the BBRS plan identification number.

110R3110.R3.2: Definitions

110.R3.2.1 General. Unless otherwise expressly stated in 780 CMR, the following terms shall, for the purpose of 70 CMR 110,R3, have the meaning of ollows: indicated in R3.2.

ALTERATION. Any construction, other than ordinary repairs of product that deviate from the approved product

APPLICABLE CODES, 780 CMR and specialized codes if applicable.

APPROVA: Approval by the State Board of Building Regulations and Standards (BBRS). The Office as designee to the BBRS may provide authorizations which rely on a TPIA validation.

BUILDING SYSTEM. Play specifications and documentation for a system of *manufactured buildings* or for a type or a system of *building components*, which may include structural, electrical, mechanical, plumbing and fire protection systems and other systems affecting health and safety, including variations which are submitted as part of the *building system*.

CERTIFICATION. Any manufacturer or product Any manufactured building, manufactured building component or manufactured home which meets the provisions of the applicable Codes and Rules and Regulations pursuant thereto; and which has been labeled accordingly.

CODE. 780 CMR or Specialized Codes as defined.

CSL. A construction supervisor license. See also construction supervisor.

110.R3 is deemedINSPECTION AGENCY. Independent agency, sometimes referred to be certified as "third-party agency," or a TPIA, retained by the manufacturer and registered by BBRS to perform

inspections, evaluations and certifications of *building systems*, compliance assurance programs, *product*, *manufactured buildings*, and *manufactured building components*.

CSL. A construction supervisor license. See also construction supervisor.

DEALER. Any individual, organization or firm engaged in the retail selling, or offering for sale, brokering, or distribution of product, primarily to a person who in good faith, purchases or leases such product for purposes other than resale.

DPL. The Massachusetts Division of Professional Licensure.

INSTALLATION. The process of affixing, or assembling **product** and affixing a manufactured building, manufactured building component or manufactured home on the building site, and connecting it to utilities, and/or to an existing building. Installation may also mean the connecting of two or more manufactured **building or** housing units designed and approved to be so connected for use as a dwelling. **INSTALLER**. An individual who, on the basis of training and experience, has been certified by a **specific** manufacturer as competent to supervise the placement and connection required to install the product of that manufacturer and possesses an MBIC. Said certification by the manufacturer shall be in writing; additionally, the certified installer shall possess picture identification in the form of a driver's license or other picture identification acceptable to the building official. The tine aller of a sord for the building permit shall report to the CSL and shall be responsible for any other responsibilities designated in 780 CMR.

LABEL. An approved device or seal evidencing *certification* of product in accordance with 780 CMR 110.R3the applicable

Codes and Rules and Regulations promulgate pursuant thereb.

LOCAL ENFORCEMENT AGENCY. A department or agency in a municipality charged with the enforcement of 780 CMR and appropriate *specialized codes*, which include but are not limited to, 248 CMR (the State Plumbing and Gas Fitting code) and 327 CMR (22 to 12 to 13 to 14 to 15 to 1

MANUFACTURED BUILDING. Any manufactured building which has concealed elements, such as electrical, mechanical, plumbing, fire protection, insulation, and other systems affecting health and safety, and which is manufactured, constructed, when ted, reconfigured, and/or assembled in accordance with 780 CMR and pertinent regulations, in manufacturing facilities, on or off the building site. Also, any manufactured building as defined above which does not have concealed elements, but which has been approved by the BBRS at the request of the manufacturer. "Manufactured building" does not mean "manufactured home."

MANUFACTURED BUT DINGS & RTIFICATE (MBC): A construction supervisor license. See also construction supervisor 110. \$1.2. \$CSL out thold a valid Manufactured Buildings Certificate (MBC). This is a unted to a CSL after success all completion of an MBC course offered by the BBRS. Each certificate shall have a expiration late.

MANUFACTURED BUILDING COMPONENT. Any manufactured subsystem, manufactured subsystem, or other system designed for use in or as part of a structure having concealed elements such as electrical, mechanical, plumbing and fire protection systems and other systems affecting health and safety.

MANUFACTURER, A business entity approved to manufacture product.

MANUFACTURES HOWES. Manufactured homes regulated under the federal

Housing and Urban Development standards as defined in 24 CFR Part 3280.2, which are not within the scope of 780 CMR 110.R3.

MODULAR HOME. Any R-Use manufactured building.

MANUFACTURED HOMES (Housing). As defined in 24 CFR, Part 3280.2; a structure, transportable in one or more sections, which in the traveling mode, is eight body feet or more in width or forty body feet or more in length, or, when erected on site, is 320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning, and electrical systems contained therein. Calculations used to determine the number of square feet in a structure will be based on the structure's exterior dimensions measured at the largest horizontal projections when erected

on site. These dimensions will include all expandable rooms, cabinets, and other projections containing interior space, but do not include bay windows. (*See* 24 CFR, Part 3280.2 for a more detailed description of manufactured homes as defined by the Department of Housing and Urban Development.)

MANUFACTURED BUILDINGS INSTALLER CERTIFICATE (MBIC): Granted to a person after successful completion of an MBIC course offered by the BBRS. Each certificate shall have an expiration date and a candidate for this certificate must possess certification from a manufacturer licensed by the BBRS.

OFFICE. The Office of Public Safety and Inspections.

PLANS. Building plans, specifications and documentation of product, which may include structural, electrical, mechanical, plumbing and fire protection systems and other systems affecting health and safety, including variations which are submitted as part of the building system.

PRODUCT. A manufactured building, manufactured building component, modular home or relocatable building.

QUALITY ASSURANCE MANUAL. The manual as outlined in section 310 of

_780 CMR 110.R3 which contains the quality assurance process specific to a manufacturer and approved by a TPIA.

RELOCATABLE BUILDING. A partially or completely assembled building commuted and designed to be reused multiple times and transported to different building situation.

RECERTIFIED MANUFACTURED BUILDING. Any mapufacture build as he a defined that was previously designed and constructed to conform with relar partic e group or Such buildings, also groups for use at a site and that subsequently e relocate to a different known as relocatable units, shall be inspected by the remonsib third-party in ction agency and recertified in accordance with 780 CM cable to mpliance with the new use group or sure groups if such use group or groups has changed inal use group or groups if require not changed prior to being set at the nev

SPECIALIZED CODES. See 780 CMR 1.00. Scope and Administration.

NATE ADMINISTRATIVE AGENCIES. Boards, THIRD PARTY INSPECTION AGENCY te, adopt and amend codes and rules and commissions, departments or agencie thorize o promule regulations relating to buildings an ets thereof and limited to the BBRS, Massachusetts and p Board of Fire Prevention Regulation s. Massac setts te Examiners of Electricians, and the Massachusetts Board of State Exam ers and Gas Fitters. ers of Plum

STATE ENFORCEMEN S. Boards. commissions, departments or agencies authorized to ENCI enforce the provisions of and regulations which have been promulgated, adopted and and rul amended and w or structures and parts thereof and limited to the Office of Public ch relat building Safety and Inspect s. Mass chusetts Poard of State Examiners of Plumbers and Gas Fitters, and the usetts State I miner f Electricians. Massa

TPIA. See Inspection Agency.

110.R3.3 COMPLIANCE ASSURANCE PROGRAMS

<u>110.R3.3.1</u>"). A <u>Approval</u>. In order to obtain approval for *product manufactured buildings* or *manufactured building components* a manufacturer shall submit their compliance assurance program for evaluation to the TPIA <u>registered</u> and the <u>Office</u> for <u>approval</u> in accordance with <u>the-110.R3</u>. Every compliance assurance program must include a <u>Quality Assurance Manual</u>.

110.R3.3.2 Suitability. Prior to a full evaluation, the *Inspection agency* shall determine that the application for *approval* of the compliance assurance program submitted to it is suitable for processing. In the event that the application is found to be unsuitable for processing, the applicant shall be notified in writing of such unsuitability and the basis thereof, within 30 days of the date the application is received

by the office. In such event, all but \$25.00 of the fee will be returned and the findings of unsuitability will be without prejudice. Any subsequent submission shall be treated as a new application.

110.R3.3.3 Requisites. The State Enforcement Agencies may require tests to determine whether a compliance assurance program meets the *codes*, standards and requirements of the evaluation of plans, specifications and documentation. The procedures used shall be reviewed and evaluated by the BBRS in accordance with 110.R3. The costs of such tests shall be borne by the applicant.

110.R3.3.4 Notification of Disapproval. In the event a compliance assurance program is disapproved by the Office, the Office shall notify the applicant with a written explanation of the reasons for such disapproval thereto.

110.R3.3.5 Approval – Evidence. Approval of a compliance assurance program shall be evidenced by a letter issued by the Office.

110.R3.3.6 Approval – Variations. A building system and compliance assurance program or any amendment there to which has been approved, shall not be varied in any way was out prior written authorization by the *Office*. All amendments shall be in writing and shall be made wart of the written record of the approval.

110.R3.3.7 Amendments – Proposed. Amendments to companie assu grams may be proposed by submitting to the *inspection agency* prior to the *Office* granting *appro* ate ph specifications, or documentation showing the effect of the proposed mendmen building system and the required fee.

m the Office of a 110.R3.3.8 Compliance Assurance Program. Amanufacty appi ct, building compliance assurance program for their buil stem. Pro build components shall be manufactured in accordance with an app ved program in ler to be certified. Compliance assurance programs shall be submitted to the Of pproved the afte

110.R3.4 CERTIFICATION

Manufactured buildings or manufactured winding compounts or manufactured homes or product, accepted by the State Enforcement Acceptes and Aspection Pency as having been manufactured according to an approved building an approved compliance assurance program, may be of the expection agency as complying with the certified by the Office upon the red nmendatio requirements of the applicable code, and 110.R. Certification shall be evidenced by the issuance of a a label to label by the Office and by ach certified; product, manufactured building or hment of ponent (or groups of an ducts) by the TPIA. manufacture building so

110.R3.4.1 May factur s Data Ra

110.R3.4.1 Manufacturer's Data Plate.
110.R3.4.1.1 Contents. The following aformation shall be placed directly or by reference on one or cturer data plate in the vicinity of the electrical distribution panel, or in some more permanent manu other designated location acceptant to the State Enforcement Agencies, on the product, manufactured building or manufactured by *iding Emponent* where it will be readily accessible for inspection.

- acturer's na e and address; 1. Manu
- 2. Serial Number of unit;
- 3. Label seria.
- 4. Name and date of applicable codes and issue of their accumulative supplements complied with;
- 5. Model designation and name of manufacturer of major factory-installed appliances;
- 6. Identification of permissible type of gas for appliance and directions for water and drain connection;
- 7. Snow, wind, seismic and other live loads;
- 8. Electrical ratings instructions and warnings on voltage;
- 9. Special conditions or limitations on use of the units, including unsuitability for areas in which specified environmental conditions prevail;
- 10. Methods of assembly or joining multiple units;

- 11. Type of construction, including fire rating, occupancy class, and interior finish flame spread class;
- 12. Building height and story limitation;
- 13. Floor area; and
- 14. 780 CMR 110.R3 and Minimum side yard requirements for fire rating.

If, in the opinion of the *State Administrative Agencies*, the shape or size of a building component is such that this information cannot be attached to it permanently, the information may be placed in a manual crated with the *product* or on a tag attached to the crate in which the *product* is shipped, if the information is not such that the future occupant of the building should know. If the occupant will need to know the information, it shall be contained in a manual which shall be presented to the occupant upon transfer of possession. If life safety is involved, the item in question shall be plainly seled.

110.R3.4.2 Labels. Each product, manufactured building or manufactured by lding component which is certified pursuant to the applicable codes and 110.R3, shall have permanently at a shed thereto, in a visible location as shown on the approved building system. Approved labels shall be attacked in a way that the labels cannot be removed therefrom without destroying such label. Said labels hall be hade part of the permanent record for the manufactured building or manufactured building company ies of which shall be retained by the manufacturer and approved by the Office to perf ation, and, the Office and the Local Enforcement Agency and or state building partment e manufactured building *product* is installed. Manufactured buildings that are to be us ocatab mit, shall be as a re testation that the issued a new label upon submission of a new Insection Age Complian e Re rt in he requireme re-locatable unit has been inspected and me s of all applicable Massachusetts codes and requirements of 110.R3.

110.R3.4.2.1 Contents. An approved and shall bear the following information.

1. The statement "This label on tiffes the building to wilding component) has been manufactured in accordance with an approved building system and compliance assurance program which has been approved by the Control workealth of Massachusetts Board of Building Regulations and Standard and manufactured building component has been inspected.

Name of Third-Party Inspection Agency

Name of Third-Party Inspects

- a. Land serial number.
- b. Building system approval number.
- c. Manufacturer's serial number
- The words See data late located on ."
- i. Date of manufacture.

At the direction of the BBRS *labels* and data plates may be limited in size and content for compounts whose stape and size does not permit the full information to be placed thereon.

- 110.R3.4.2.2 Issuance of Labels. The *approved label* shall be issued by the *Office* in accordance with the following.
- 1. If the *Office* delegated the issuance of *labels* to an *inspection agency*, the agency shall be required to obtain approval from the BBRS for the manner in which they are handled;
- 2. Labels must be serially numbered and affixed to product by the TPIA;
- 3. A manufacturer's compliance assurance program submitted in accordance with 110.R3 shall include requirements for issuance, possession of, attachment of by the TPIA, and accounting for all *labels* to assure that *labels* are attached only to *product*, *manufactured buildings*, *manufactured building* components, or manufactured homes manufactured pursuant to an approved building system and inspected pursuant to an approved compliance assurance program.

110.R3.4.3 Records of Labels. Permanent records shall be kept of the handling of all *labels*, indicating at least how many labels have been applied to product, to manufactured buildings or manufactured building components (or groups of components), and which labels have been applied assigned to which product, buildings or building components, the disposition of any damaged or rejected labels, and the location and custody of all unused *labels*. Such records shall be maintained by the *inspection agency* and a copy of such records covering attachment of each label shall be sent to the Office on the tenth of each month. 110.R3.3.4 Attachment of labels. The inspection agency shall attach in numerical sequence labels to product, manufactured buildings or manufactured building components manufactured in accordance with an approved quality assurance manual, building system and meeting the requirements of an approved compliance assurance program. *Inspections agencies* shall attach *labels* in the same manner to *product*, manufactured buildings or building components manufactured in accordan with an *approved* compliance assurance program and meeting the requirements of an approved empliance assurance program. Inspection agencies shall attach labels in the same manner to product, anufactured buildings or building components manufactured in accordance with an approved compliance surance program. 110.R3.4.5 Suspension and revocation. The BBRS may suspend or revolution be suspended or cause revoked, the certification of manufacturers and productany p buildi luct, man manufactured building component which the State Enforcement Agencie ction ency finds not to comply with the applicable *codes* or 110.R3, or which has been manufact suant to a building system or a compliance assurance program for which approx suspe d or revoked. or which has not been manufactured in accordant with the liand 12.21 nce manual. The State Enforcement Agencies shall withhold oid a label or e removed, labels all remove from any such product, manufactured build manufactured yilding compor t or manufactured home until it is brought into compliance with cable c and 110.R3. Notice of suspension or revocation of *certification* shall be in iting wi or revocation clearly set for st reaso forth.

110 R3 3: Certification of Manufacture

110.R3.3.1 General. An entity wh nce program in conformance with a quality assurance manual in accord may apply to the Office for certification as a manufacturer. An entity seeking to rfacturer or a manufacturer seeking to renew a come a ma certification shall submit lication o the Of e for approval. These applications will include, but not be limite o: a qua **l** and ee. A certification shall be issued for an application ma that meets the of 780 or the Offices shall notify the applicant of the reasons for refusal. Certification genewals of certifications shall be valid for a period of one year. issued ar ions fix

110.R3 **Ouality As** qual. The quality assurance manual of a manufacturer shall consist of nce I 780 CMR 110.R3. It is the responsibility of the manufacturer to execute the require ts containe is manual. every aspect of ne manufacturer shall continue to be responsible for all corrective actions required and the ractual ationship between the manufacturer and the TPIA shall not diminish such responsibility. The m er shall cooperate with the TPIA by providing all necessary reports, information, documents, records, facilities, equipment, samples and other assistance for assuring compliance with 780 CMR 110.R3. The manual shall be comprehensively indexed, and shall treat the material listed here in detail, as follows:

1. A procedure for periodic revision of the quality assurance manual;

2.1.2. An organizational structure for implementing and maintaining the quality assurance program and its functional relationship to other elements of the organization structure of the manufacturer, which structure shall provide for independence from the production department; company officers and employees in charge of the quality assurance program shall be identified, and their training and qualifications specified;

- 3.1_3. A uniform system of audit (in-depth analysis of program effectiveness and means to identify deficiencies) to monitor the quality assurance program periodically;
- 4.1.4. Complete and reliable records of manufacturing and site operations, if any (suitable means of storage, preservation and accessibility of copies of forms to be utilized shall be included):
- 5.1.5. A system to control changes in production or inspection procedures within the manufacturing facility;
- 6. A system to assure that working drawings and specifications, working instructions and standards, procurement documents, etc. conform to the approved building system;
- 7. A serial number system for buildings or building components; and
- 8. The method of safekeeping, handling and attaching labels and tentification of those employees responsible therefore.

6.1.9. Materials Control.

- a. a. Procedure to assure effective control over procurement courses to ensure that materials, supplies and other items used in production and site operations, if any, conform to the approved plans, specifications and quality requirements:
- b.a.b. Procedures for inspection of materials, supplies and other items of the point of receipt:
- c.a.c. Method of protection of materials, supplies and other items against deterioration prior to their incorporation in the certified buildings or building component; and d.a.d. Provision for disposation rejected materials, supplies and other items.

10. Product Control.

- a. 1. Upon suspension or revocation of buildi system or compliance assurance md/or a program, no further *labels* shall be iss d, assign ched anv duct, manufactured buildings or manufactured building confactured ursuant to the building system or nents compliance assurance program with respec which th approval was suspended or revoked. Upon termination of such suspension or revocati rain be is ded and/or assigned and attached to bels may the product, manufactured building or manufactured ed building *components* manufactured after the date or building component have been manufactured approval was reinstated. Should an buildi during the period of suspension or shall n be issued a *label* unless the *State Enforcement* vocation. Agencies or inspection agency have spected suc product, building or building component and is satisfied that all requirem r certification hav been met. If the *State Enforcement Agency* acts under ction agency 110.R3.4.5, i must notify
- bels afformed for a product, manufactured building or 2. The manufac rer shal turn all le gent to the BBRS no later than 30 days from the effective date of any manufactured build 1g comp on or revocati n of the State Enforcement Agency or inspection agency, of the building system or ram payant to which the product, manufactured building or manufactured compliance assurance pr manufactured. The manufacturer shall also return to the BBRS all labels building com *nent* is being es, for any ason, are no longer needed. which it determ
- 110.R3.4.6 Varia has of Confided Units. Product, manufactured buildings, manufactured building components or manufactured building switch has been certified and labeled pursuant to the applicable codes and 110.R3 shall not be varied in any way prior to the issuance of the certificate of occupancy without resubmitting the revised building system to the TPIA and then the Office for its approval of the variation the unit which includes the variation. The Local Enforcement Agencies or an inspection agency shall inspect the product, manufactured building, manufactured building component or manufactured home wherever it is located and such inspection may include such tests or destructive or nondestructive disassembly as the Local Enforcement Agencies or an inspection agency deems necessary to assure compliance with the applicable Codes and 110.R3.

110.R3.5 INSPECTION BY THE STATE ENFORCEMENT AGENCIES OR ITS AGENTS

- e.a. The State Enforcement Agency shall make, or cause to be made, such Procedures for timely remedial and preventive measures to assure product quality;
- f.a. b. Provision, maintenance and use of testing and inspection;
- c. Provision for frequency of sampling inspections;
- g.a. d. Provision of necessary authority to reject defective work and carry out compliance assurance functions, notwithstanding any conflict with production department goals and needs;
- h.a.e. A schematic of the manufacturing operation showing the location of inspection stations or areas, and "hold" points for mandatory inspection characteristics;
- f. Inspection and test procedures, including accept/reject criteria and mandatory inspection characteristics;
- g. Standards of workmanship; and
- i.a. h. Provision of disposal of rejects.
- 7.1.11. Finished Product Control.
 - a. Procedure for final inspection of all product before shipment to the lite or storage point, including identification and labels;
 - b. Procedures for handling and storing all finished product, both at the manufacturing plant or other storage point and after delivery to the building site.
 - a. c. Procedures for packing, packaging and shipping operations and related inspections;
 and
 - b.a.d. Procedures for transportation, including all measures to proceed product against damage while in transit, and setting forth to modes of transportation to be utilized and the carrying equipment and procedures.
- 8.1.12. Installation Control
 - a. a. Installation protectures including component placement or set, equipment and procedures, field erection and finishing work utility connection instructions and all appropriate on-site inspection criteria and test descriptions; and
 - b.a.b. Organizational provisions or field repair and disposal of rejects.
- 9.1.13. Permission for Juspection. The manufacturer shall provide the *Office* with written permission, signed and notarized, for the *Office* to inspect manufacturing facilities, products, and building sites under his order control at any reasonable time without prior announcement.
- 14. Shall contain detailed plans for inspections by the Office or the TPIA.

110.R3.4: Registration of TPIA

- 110.R3.4. General. A partity with seeks to register as a TPIA or to renew a registration as a TIPA shall submit at application and a fee to the Office for approval. Applications will include, but not be limited to, the acquirements of 780 CMR 110.R3. A registration shall be issued for an application that meets the requirements of 780 CMR 110.R3, or the Office shall notify the applicant of the reasons for refusal. Registrations have each and renewals of registrations shall be valid for a period of one year.
- 110.R3.4.2 Registration Requirements. Applications shall contain, but not be limited to, information on the following; corporate structure, employees, inspection programs, test reports and data sheets, insurance, responsibility and liability, and certification, labels and product. The TPIA applicant shall attest that:
 - 1. All submissions are a true and accurate statement of the personnel, equipment, and procedures that will be followed to certify product;
 - 2. The agency's board of directors, as a body, and its technical personnel as individuals, shall exercise independent judgment;

- 3. The agency's activities shall not result in financial benefit to the agency through stock ownership, or other financial interests in any producer, suppliers, or vendor of products involved, other than through standard published fees for services rendered;
- 4. The agency shall not perform architectural, mechanical, electrical, plumbing, sprinkler, or structural design or quality assurance program approvals for any manufacturer who uses the same agency, in whole or in part, by members of the agency or any affiliated organization for in-facility inspections or other TPIA services;
- 5. All inspectors, evaluators, and other technicians are adequately trained and qualified to perform each job assigned to them; and
- 6. The agency is able to evaluate product for compliance with all applicable codes, standards, laws, and rules-

110.R3.5: Dealers

110.R3.5.1 General. Any dealer who contracts for product that is installed to intended to be installed in the Commonwealth shall, as a minimum, be registered with the Secretary of the Commonwealth and the Massachusetts Better Business Bureau. Complaints against a dealer received by the Office any be forwarded to the Massachusetts Better Business Bureau, the Office of the Attorney Coneral of Massachusetts, the Office of Consumer Affairs and Business Regulations, or other entity for appropriate action.

Exceptions:

- a. Individuals licensed or certified under other state of inderal law, when the law provides for specific authority to provide that particular services or payments the requirement for such a registration.
- b. Holders of an active license is red by the Massache, tts Read Late Commission.
- c. Any licensed construction super in a who contracts drawtly with the owner or dealer.

110.R3.6: Certification of Plans

110.R3.6.1 General. Plans for new 11 constructed or recordified product shall meet the requirements set forth in this section and are to be evaluated for compliance with 780 CMR 110.R3 and certified accordingly by the TPIA. Countied plant along with a fee are to be submitted to the Office for review and approval.

- 110.R3.6.2 Construction Bosuments: All documents submitted with the application shall be identified to indicate the manufacturer's name, office address and address of the manufacturing facility and shall contain as a minimum the following information:
 - 1. Pans shall be submitted at owing all elements relating to specific details on properly identify the sheets.
 - 2. Each plan application shall bear the signature and seal of a registered design professional certifying that the plans comply with the applicable codes and standards, where applicable.
- 3. All work to be performed on site, including connection of all systems, equipment and appliances, shall be identified and distinguished from work to be performed in the manufacturing facility.
 - 4. Grade, quality and identification of all material shall be specified.
 - 5. Design calculations and test reports shall be specified.
 - 6. Drawings shall be drawn to scale and be legible and indicate the location of the data plate and shall be dated and identified. The number of sheets in each set shall be indicated.
 - 7. Plans for product shall provide or show, but not be limited to, the details listed below including the method of their testing or evaluation, or both. These requirements shall apply to the plans for building components only to the extent deemed necessary to permit a proper evaluation of the building component.

```
a. General.
                 i. Details and methods of installation of product on foundations and/or to each
                 other.
ii. All exterior elevations.
iii. Cross sections as necessary to identify major building components.
iv.-Details of flashing, such as at openings and at penetrations through roofs and subcomponent
connections. Indicate flashing material and gauge to be used.
v. Attic access and attic ventilation.
vi. Exterior wall, roof and soffit material as well as finish.
vii. Interior wall and ceiling finish material.
viii. Fire separation walls.
ix. Sizes, locations and types of doors, windows and fire/smoke de
x. Recommended foundation plans, vents and underfloor access.
        b. Building Classification.
                 i. Occupancy or use group.
ii. Area, height, and number of stories.
                 iii. Type of construction.
iv. Fire resistance ratings.
        c. Space and Fire Safety.
                 i. Details of fire re
                 walls, floors, ceili
                                          <del>partiti</del>
                                                               roof and s
                                                                               enclosures and how
                 continuity wi
                                                                tal and
                                                                               1 junctions.
ii. Detail of fire protection sy
iii. Details as to width of all ais
                                                                       ad stairway enclosures.
                                                 <del>lors, pa</del>
                                                             eeway.
iv. Toxicity and flame spread class
                                                     shed no
                                                                <del>rials.</del>
        d. Structural Detail Requi
i. Engineer's calculations of s
                                                           appropriate.
ii. Structural and framing
                                                  <del>oof and walls.</del>
iii. Details and stress diagr
iv. Details of reinforcing a
v. Complete load
vi. Column loa
                        details of all structural elements.
<del>viii. Size</del>
                                     elements (lumber, steel, etc.).
                            structura
                             ements, walls or sections thereof, providing resistance to vertical loads
    levation of
                    ctural
                        all structural connections.
              <del>chanic</del>
                         Detail Requirements.
                        ation of all equipment and appliances. Indicate equipment and appliances
                 ii. listed or labeled by approved agencies.
                 iii. Heat loss and heat gain calculations or approved prescriptive method.
iv. Manufacturer's name, make, model, number, BTU, input and output rating of all equipment
and appliances, as appropriate, or the equal thereof.
v. Duet and register locations, sizes, and materials.
vi. Clearances from combustible material or surfaces for all ducts, flues and chimneys.
vii. Method of providing required combustion air and return air.
viii. Location of flues, vents and chimneys and clearances from air intakes and other vents and
flues.
```

ix. Details regarding dampers in ducts penetrating fire separations.

```
x. Complete drawings of fire sprinkler system, standpipe system or smoke/fire alarm system as required.
```

xi. Detail of elevator or escalator system, including method of emergency operation.

xii. Duct and piping insulation thickness.

xiii. Ventilation air calculations.

f. Plumbing Detail Requirements.

i. Plan or schematic drawing of the plumbing layout including, but not limited to, size of piping, fitting, traps and vents, cleanouts and valves, gas, water, and drainage system.

ii. Plumbing materials, and location of all equipment and appliances to be used. Indicate fixture unit capacity of system(s) and the make, model, and rating/capacity of equipment and appliances. Indicate equipment and appliances listed or labeled by approved agencies.

iii. Make and model of safety controls (such as for water heaters), their location, and whether listed or labeled by approved agencies.

iv. How piping is to be supported and intervals of support.

v. Location of vents above roofs and required clarance including but not limited to, clearances from air intakes, other vent and flyoris. Methods of testing.

g. Electrical Detail Requirements.

i. Plan of service equipment, including service entrance, conductors, service raceway and clearances above ground and above structures.

ii. Method and detail for grounding service equipment

iii. Single ling dogram of the entire electrical system

ivprocessing of Load calculations for service and fooders.

v. Sizes of all feeders and branch sireuits

vi. Size, rating and location of main disconnect evereurrent protective devices.

vii. Method of interest nection between product and location of connections.

viii. Location of all outlets and junction toxes.

ix. Method of mounting fixtures and wiring installations.

x. Lighting power calculations.

110.R3.7: The Office Inspections

110.R3.7.1 General. The office, as a deems are ssary, may conduct a review of processes a manufacturer's processes at Nor TPIA expection practices or any other requirement governed by 780 CMR to 0.R3. This may include any part to the entire process of manufacturing, certifying, handling, storing and transporting of product pursuant to approved plans. No inspection entailing disassembly, damage to or lestruction or certified product shall be conducted except to implement 780 CMR 110.R3, manufactured savidings or manufactured building components produced pursuant to approved building systems as they do no necessary.

110.R3.7.2 Damaged Product. Any finding 5.1 Inspection of damage to product shall cause immediate notification to be made to Facilities. As part of the Office, TPIA process of evaluating building systems and

compliance assurance programs, the manufacturer. State Enforcement Agencies shall inspect, or cause to be

inspected, the manufacturing facilities in which the *product*, *buildings* or building components are to be manufactured.

110.R3.5.2 Inspection According to Compliance Assurance Programs. The State Enforcement Agencies or an inspection agency shall make such inspections as may be required by an approved compliance assurance program, or as may be deemed necessary by the State Enforcement Agencies.

110.R3.5.3 Inspection of Damaged Components. Prior to the issuance of a certificate of occupancy, the Office State Enforcement Agencies or an inspection agency shall inspect, or cause to be inspected, certified product, manufactured buildings or manufactured building components which it determines to have been sufficiently damaged after certification to warrant such inspection and to take such action with regard to such product, buildings or building components as is authorized hereof, or as is otherwise necessary to eliminate dangerous conditions. The local enforcement agencies may designate the Office as the inspection agency.

110.R3.7.25.3.1 Repairing Damaged Components. The Office State Enforcement Agencies or a TPIA inspection agency shall require product, manufactured buildings or manufactured building components which are so damaged as to no longer comply with the applicable codes Codes and 780 CMR 110.R3 to be repaired and made to comply within 14 days of discovery and after proper written notice to the manufacturer, installer and owner the TPIA; or if they are so damaged that they are product cannot be brought into compliance, the Office or a TPIA State Enforcement Agency shall order that the labels be removed and voided for from such product. A report shall be filed with the buildings building components or manufactured homes.

TPIA and the Office. Irreparably 110.R3.5.3.2 Significantly Damaged Components Signs cantly damaged product or building components determined by the Board of Building Degustions and Standards shall be disposed of by the manufacturer. The BBRS may a signate comeon of an entity (i.e., the CSL and/or owner. Building Code Appeals Board) to act on their behalf.

The Office State Enforcement Agencies or 110.R3.7.3 TPIA Review.5.4 Monitoring spection Agency their designated agents shall audit a T examine each a inspection agency, at any reasonable prove time, and without prior announcement, in order to monitor the reliability of each TPIA agency and of its monitoring of qualityeach compliance assurance as valsprogram, Each such auditexamination shall investigate the adequacy of all procedures used by the agency in monitoring compliance assurance programs including inspection, tests, production methods, process controls, operator performance, materials, receipts, storage and handling, workmanship standards, records and all other activities which implement the qualitycompliance assurance program in the manufacturing facility, during transport, or on-site (as applicable), and at critical subcontractors facilities. The results of such auditexaminations shall be filed with the Office and sent to the TPLA in writing, within 14 days office. Copies of discovery. The TPIA such reports shall be sent to the inspection agency. Inspection agencies shall be specifically notified by the Office of any deficiencies and of the manner and time by which such deficiencies shallmust be eliminated. If deemed necessary by the Office, a TPIA registration State Enforcement may be suspended or revoked. An audit may also be conducted Agencies, an inspe y's approv on agei by the ffice before n inspect on agency for first issuance of a registration by the BBRS as provided.

110.R3.8: Local Agency Enforcement

110.R3.5.4.1 Prior to Approval. Such examinations may also be conducted before approving an inspection agency.

110.R3.5.5 Inspection by Disassembly. No inspection entailing disassembly, damage to or destruction of certified; *product, manufactured buildings, manufactured building components* or *manufactured homes* shall be conducted except to implement 110.R3.

110.R3.68.1 LOCAL ENFORCEMENT AGENCY PROCEDURES AND INSPECTIONS

<u>110.R3.6.1 Issuance of Building Permits</u>. Upon application and in conformity with the provisions of 780 CMR-and 780 CMR 110.R3, the *building official* shall issue building permits for installation of

product certified product, manufactured buildings, manufactured building components or manufactured housing.

110.R3.86.1.1 Owner's AgentLicensed Construction Supervisors and Certified Installers. A CSL, duly licensed in accordance with 780 CMR

110.R5 and holding a valid MBC, shall, in accordance with 780 CMR 1.00: Scope and Administration, be hired by and shall act as the agent for the owner, through issuance of the final certificate of occupancy, for the purpose of applying for and obtaining any and all permits required for involving the field installation of all-product. The CSL shall be responsible for, but not limited to the construction of the foundation system, the attachment to the foundation, and completion of the product, and all pertinent site work required by section 105 of 780 CMR and shall provide at least 48 he is 48 hours' notice to the Office and the building official before the placement and connection of such units shall begin. The MBIC responsibilities shall also include keeping the structure weather tight through the completion of the set. The Installer shall remain present for installation of all the structural connections and see that the envelope of the structure is in a weather tight state.

110.R3.86.1.2 Submittal Documents. As part of the permit application process, the *CSL* shall submit to the *building official*, in writing:

- a. a. The name of the *installer* holding a valid MBIC, who shall be duly certified by the manufacturer to install said manufacturer's product, and is identified as an installer of product. The *installer* shall be responsible for the safe and proper placement and connection of the product in accordance with 780 CMR, 780 CMR, 110.R3, and the MB Cresponsi iliti specialized codes and keeping the structure the set. The *Installer* shall etion weather tis e com hrough, d connections and shall be responsible remain present for install tion o he structu of the st for ensuring that the envel cture is a weather tight state.
- b. b. A statement that the work to be performed under such permit is to include the installation of the specific type of *product* in accordance with the provisions of the applicable *codes*, the statement is to be signed by the applicant or his or her agent, with the appropriate address.
- c. e. A true copy of the *approved product* and where it was manufactured or is to be manufactured, where one has not previously been furnished to that *local enforcement agency*.
- d. Site specific plans and specifications.
- e. e. Plan Identification Number Assignment Form for newly constructed or recertified units with BBRS number. This is to confirm plans have been approved by the state and shall include a stamp approval and signature.
- f. f. Plans shall be stamped on every page by a TPIA.
- g. Every page showing calculations by a registered design professional shall be provided with their stamp and signature.
- h. h. Energy compliance certificate information.
- i. i. Set manuals are required to be on-site at time of project set.

 Exception: EXCEPTION: If all connection details are provided on the plans, then the set manual is not required.
- j. <u>j. Set crew A copy of the *MBIC*'s certificate and</u> information shall accompany the plan submittal package with approved certification from <u>the</u> manufacturer.
- k. A copy of the CSL's MBC.

110.R3.86.2 Inspection of Site Preparation and Service Connections. Appropriate local enforcement agencies shall inspect site preparation work including foundations, not within the scope of the approval

and certification, and the structural, mechanical, plumbing, sprinkler, and electrical connections among units or components, for compliance with applicable law, rules and regulations.

110.R3.8.3 Compliance with Instructions. Appropriate *local enforcement agencies* shall inspect all product upon, or promptly after, installation at the building site to determine whether all instructions in the set connection details report or conditions listed on the manufacturer's data plate have been followed. This may include inspections for exterior weather-tightness and protection, tests for tightness of plumbing and mechanical systems, and for malfunctions in the electrical system and a visual inspection for obvious nonconformity with the approved *building* planssystem.

110.R3.8110.R3.6.3 Compliance with Instructions. The appropriate local inforcement agency shall inspect all manufactured buildings, manufactured building components or manufactured homes upon, or promptly after, installation at the building site to determine whether all instructions in the Building System Approval Report or conditions listed on the manufacturer's data plate have been followed. This may include tests for tightness of plumbing and mechanical systems, and for malfunctions in the electrical system and a visual inspection for obvious nonconformity will the approved Backling System.

<u>110.R3.6</u>.3.1 Disassembly Prohibited. Destructive disassembly of *product* shall not be performed in order to conduct such tests or inspections, nor shall there be imposed standards or test criteria different from those adopted by the *Office* or specified in the approved transbut the system or the "HUD's" Manufactured Home Construction and Safety Standard.

110.R3.86.3.2 Opening Panels. Nondestructive disassembly may be performed only to the extent of opening access panels and cover plates.

110.R3.86.4 Non-complying New to Recerth ad Units. Local enforcement agencies shall report to the BBRS in accordance with the CMR 110.R3.6. any non-complying product, manufactured buildings, and building com, provis which the determined to be noncomplying to 780 CMR. Should the noncompliant matter be the result of the manufacturer's work, the Local Enforcement Agencies and the BBRS shall notify the 1.20 and to manufacturer forthwith.

110.R3.86.5 Certificates of Occupancy. Building office. The building official shall issue certificates of able if such produc occupancy for product as hascertified manufactured buildings and manufacture homes ca omponents which otherwise comply with all the have been installed and inspected pursuant to the applicable codes and 780 applicable code after th rovided the CMR 110.R3 and any product, manufactured building or manufactured building with the approved building specifications and plans. Any noncompliant compon nt found not comply y manufactured home found not to comply with "HUD's" Manufactured ng System or items Build y Standards shall be brought into compliance before such certificate of Home Cons ction and S occupancy shall be issued.

110.R3.86.6 Reporting of volations to Division of Professional Licensure. violations to the BBRS. When any local enforcement agency is making an inspection Local Enforcement Agency is inspecting and finds violations or suspected violations, it shall report the details of the violations in writing to the BBRS. Where violations are hazardous to occupants, a certificate of occupancy shall not be issued, and the building shall not be occupied before such hazards are corrected. If the violations are not hazardous, a temporary certificate of occupancy may be issued.

110.R3.7 NOTIFICATION OF CHANGES IN NAME, ADDRESS, OWNERSHIP OR LOCATION

<u>110.R3.7.1</u> <u>Notification by Manufacturers.</u> Manufacturers shall notify the BBRS in writing within ten days of any of the following occurrences:

- 1. The corporate name is changed;
- 2. The main address of the company is changed;
- 3. There is a change in 25% or more of the ownership interest of the company within a 12-month period;
- 4. The location of any manufacturing facility is changed;
- 5. A new manufacturing facility is established; or
- 6. There are changes in principal officers of the firm.

110.R3.7.2 Notification by Inspection Agencies. Inspection agencies shall notify the BBRS in writing within ten days of any of the following occurrences.

- 1. The company name is changed;
- 2. The main address of the company is changed;
- 3. There is a change in 25% or more of the ownership interest or control of the company within a 12-month period;
- 4. The location of any testing facility is changed;
- 5. A new testing facility is established; or
- 6. There are changes in principal officers and key supervisory and respectible personnel of the firm.

110.R3.8 PROPRIETARY INFORMATION

mpliance surance prog the manufacturer All information relating to *Building Systems* designand at the or other party considers proprietary shall be time of its submission, and shall be so held by the State Enforcement Agenci Agencies, xcept as the State e Admir trativ Administrative Agencies determine in ch case. o carry out the purposes of disclos the applicable codes and R3.

PART II—REQUIREMENTS FOR SUBJACTION OF WILDING SYSTEMS AND COMPLIANCE ASSURANCE PROGRAMS

110.R3.9 Compliance Assurance JILDING SYS'N MS

Building systems shall meet the requirements set both below to be evaluated for compliance with the standards, specification and requirements adopted by the State Administrative Agencies.

110.R3.9.1 General Requirements. Suilding stem plans for newly constructed or recertified product shall meet the requirements at forth in his section and are to be evaluated for compliance with 780 CMR and confided accordingly by the TPIA. Confided plans along with any required fee are to be submitted by the TPIA at the Office its issuing a BBRS Plan Identification.

110.R3.9.13. Plans, Specifications and Documentation. Building systems, including all plans, specifications and other documentation, may be required to be submitted in quadruplicate to the Office who can act as the appositor and disburser of all such items. The Office may forward to the appropriate State Enforcement As a will be unliding system plans, specifications and documentation for their recommendations.

<u>110.R3.9.1.2</u> Form and Fees. *Building systems* shall be submitted in the form prescribed by the *Office* and shall be accompanied by all required fees.

<u>110.R3.9.1.3 Identification</u>. All documents submitted shall be identified to indicate the manufacturer's name, office address and address of the manufacturing facility.

<u>110.R3.9.1.4 Plans Showing Elements</u>. *Building system* plans shall be submitted showing all elements relating to specific systems on properly identifiable sheets.

<u>110.R3.9.1.5 Approved Registered Design Professional</u>. Each *building system* page shall bear the date, signature and seal of a *registered design professional* certifying that the *building system* complies with the applicable *codes* and standards promulgated herein.

<u>110.R3.9.1.6 On-site Work Identified.</u> All work to be performed on-site, including connection of all systems, equipment and appliances, shall be identified and distinguished from work to be performed in the manufacturing facility.

10.R3.9.1.8 Material Grade and Quality. Grade, quality and identification of all material shall be specified.

110.R3.9.1.9 Calculations and Test Reports. Design calculations and test reports shall be specified and project specific.

110.R3.9.1.9.1 Drawings to Scale. *Building system* plans shall be drawn to scale and be legible.

110.R3.9.1.9.2 Label and Data Plate Location. *Building system* plans shall indicate the location of the data plate and state issued *labels*.

110.R3.9.1.9.3 Drawings Dated and Identified. *Building system* plans skyl be dated and identified. The number of sheets in each set shall be indicated.

110.R3.9.2 Certified Plans. Building systems for product shall provide or show, but not be limited to, the details listed below including the method of their testing or evaluation, or both. These requirements shall apply to the building systems for building components only to the extent decreed necessary by the State Enforcement Agencies to permit a proper evaluation of the building components.

110.R3.9.2.1 General.

- 1. Details and methods of *installation* of *manufactured bulk* lings or manyactured building components on foundations and/or to each other
- 2. All exterior elevations.
- 3. Cross sections as necessary to identify major building component
- 4. Details of flashing, such as at openings and of penetrations through confe and subcomponent connections. Indicate flashing material and gauge to be used.
- 5. Attic access and attic ventilation.
- 6. Exterior wall, roof and soffit material as wall as finish
- 7. Interior wall and ceiling finish material.
- 8. Fire separation walls.
- 9. Sizes, locations and types of doors, windows and the/smoke detectors.
- 10. Recommended foundation plans yents and underfloor access.

110.R3.9.2.2 Building Classification.

- 1. Occupancy or use.
- 2. Area, height, and number of stories.
- 3. Type of construction.
- 4. Fire resistance ratings.

110.R3.9.2.3 Space and Five Safety.

- Details of the resistance rated a semblies for all stairway enclosures, doors, walls, floors,
- columns roof and shaft enclosures.
- 2. Detail of fire protection systems.
- 3. Detail as to width of all aisles, exits, corridors, passageways and stairway enclosures.
- 4. Toxicity and flame spread classification of finished materials.
- 5. Identify structural adhesives and provide the locations will be applied, the specifications including but not limited to the manufacturer and type.

110.R3.9.2.4 Structural Detail Requirements.

- 1. Engineer's calculations of structural members, where appropriate.
- 2. Structural and framing details of all floors, roof and walls.
- 3. Details and stress diagrams of roof trusses.
- <u>4</u>. Details of reinforcing steel.
- <u>5</u>. Complete loading schedule.
- 6. Column loads and column schedule.
- 7. Lintel schedule.
- 8. Size, spacing and details of all structural elements.

- 9. Grade or quality of all structural elements (lumber, steel, etc.).
- <u>10.</u> Elevation of structural elements, walls or sections thereof, providing resistance to vertical loads or lateral forces.
- 11. Complete details of all structural connections.

110.R3.9.2.5 Mechanical Detail Requirements.

- 1. Location of all equipment and appliances. Indicate equipment and appliances listed or labeled by approved agencies.
- 2. Heat loss and heat gain calculations.
- 3. Manufacturer's name, make, model, number, BTU, input and output rating of all equipment and appliances, as appropriate, or the equal thereof.
- 4. Duct and register locations, sizes, and materials.
- <u>5</u>. Clearances from combustible material or surfaces for all ducts, flues and chimneys.
- 6. Method of providing required combustion air and return air.
- 7. Location of flues, vents and chimneys and clearances from air intakes and other vents and flues.
- 8. Details regarding dampers in ducts penetrating fire separations.
- <u>9. Complete drawings of fire sprinkler system, standpipe system or smoke/fire alarm system as required.</u>
- 10. Detail of elevator or escalator system, including method of emergency operation.
- 11. Duct and piping insulation thickness
- 12. Ventilation air calculations.

110.R3.9.2.6 Plumbing Detail Requirement

- 1. Plan or schematic drawing of the pumbing layout, in beding but not limited to, size of piping, fitting, traps and vents, cleane as and valves, gas, wher, and drained system.
- 2. Plumbing materials, and location of a Leguipment and appliances to be used. Indicate fixture unit capacity of system(s) and the make, model, and rating sapacity of equipment and appliances. Indicate equipment and appliances, listed or labeled by approved agencies.
- 3. Make and model of safety controls (such as for water heaters), their location, and whether listed or labeled by approved agencies.
- 4. How piping is to be supported and intervals of support.
- 5. Location of vents above loofs and required clearances, including but not limited to clearances from air intakes, other pants and flues.
- 6. Methods of tasting.

110.R3.9.2.7 Electrical Detail Requirements

- 1. Plan of vervice equipment, including service entrance, conductors, service raceway and learances above ground and above structures.
- Method and detail for grounding service equipment.
- 3. Single line diagram of the entire electrical installation.
- 4. Load calculations for service and feeders.
- 5. Sizes of all feeders and branch circuits.
- 6. Size, rating and location of main disconnect/overcurrent protective devices.
- 7. Method of interconnection between manufactured buildings or manufactured building components and location of connections.
- 8. Location of all outlets and junction boxes.
- 9. Method of mounting fixtures and wiring installations.
- 10. Lighting power calculations.

110.R3.10 CERTIFICATION OF MANUFACTURER AND QUALITY ASSURANCE MANUAL

The *Quality Assurance Manual* needs to conform to the requirements set forth in 110.R3. It is the manufacturer's responsibility to execute every aspect of this manual. The manufacturer shall continue to be responsible for all corrective actions required and the contractual relationship between the

manufacturer and the *inspection agency* shall not diminish such responsibility. The manufacturer shall cooperate with the *inspection agency* by providing the *inspection agency* with all necessary reports, information, documents, records, facilities, equipment, samples and other assistance for assuring compliance. The manufacturer's compliance assurance program shall be submitted to the BBRS in the form of a *quality assurance manual* which shall contain complete documentation of all compliance assurance activities of both the manufacturer and the *inspection agency*. The *quality assurance manual* shall describe how each of the below requirements are being fulfilled. Should the manual be indexed as provided herein and include satisfactory answers to each criteria below, it can be approved by the TPIA. The TPIA shall make a finding that the material listed here in detail, as follows:

- 1. A procedure for periodic revision of the quality assurance manual;
- 2. An organizational structure for implementing and maintaining the quality assurance program and its functional relationship to other elements of the organization structure of the manufacturer, which structure shall provide for independent from the production department; company officers and employees in charge of the quality assurance program shall be identified, and their training and qualifications specified.
- 3. A uniform system of audit (in-depth analysis of program effectiveness and means to identify deficiencies) to monitor the quality assurance program periodically:
- 4. Complete and reliable records of manufacturing and ste operations, if any (suitable means of storage, preservation and accessibility of copies of forms to be utilized shall be included):
- 5. A system to control changes in production or inspection procedures within the manufacturing facility.
- 6. A system to assure that working drawings and specifications, working instructions and standards, procurement documents, etc. conform to the approved building system;
- 7. A serial number system for manufactured buildings or manufactured building components; and
- 8. The method of safekarsing, handling and the process for the TPIA to attach *labels* and identification of those engages it sponsible derefore.
- 9. Materials Control.
 - a. Procedure to assure effective control ver procurement sources to ensure that materials, supplies and other items used in production and site operations, if any, conform to the approved plans, specifications and quality requirements;
 - Procedures for inspection of materials, supplies and other items at the point of receipt;
 - c. Method of protection of materials, supplies and other items against deterioration prior to beir incorporation in the certified buildings or building component; and
 - d. Provision for disposal of rejected materials, supplies and other items.

Product Control

Procedures for timely remedial and preventive measures to assure product quality;

- b. Provision, maintenance and use of testing and inspection;
- c. Provision for frequency of sampling inspections;
- d. Provision of necessary authority to reject defective work and carry out compliance assurance functions, notwithstanding any conflict with production department goals and needs;
- e. A schematic of the manufacturing operation showing the location of inspection stations or areas, and "hold" points for mandatory inspection characteristics;
- f. Inspection and test procedures, including accept/reject criteria and mandatory inspection characteristics. Procedures shall include the TPIA carrying out component inspections and corrective actions to be completed before the TPIA issues inspection approval;
- g. Standards of workmanship; and

- h. Provision of disposal of rejects.
- 11. Finished Product Control.
 - a. Procedure for final inspection by the TPIA of all product before shipment to the site or storage point, including identification and the TPIA attaching the *labels*;
 - b. Procedures for handling and storing all finished product both at the manufacturing plant or other storage point and after delivery to the building site;
 - Procedures for packing, packaging and shipping operations and related inspections;
 and
 - d. Procedures for transportation, including all measures to protect product against damage while in transit, and setting forth the modes of transportation to be utilized and the carrying equipment and procedures.

12. Installation Control.

- a. Installation procedures including component placement or set, equipment and procedures, field erection and finishing work, utility connection instructions and all appropriate on-site inspection criteria and test descriptions; and
- b. Describe the program which shall adequate Ny educa allers out the product installation procedures which contributes to an ind idual b declared a certified installer by the respective manufacturer. The program mus written notice that the *installer* is responsible for installing all of conne ns and written provisions for critical detailarocesses any nstr tion irregularities the procedures for discovered during the in on. The gram must a the Certified MBIC to low when a viol ion of 780 CM is observed or an item of non-compliance Manufa stallation pro edures is identified. In addition, the pro tha equire a Registered Design am mus clude cedu Professional inspect pliant co ditions or perceived 780 CMR violations ol<u>ve.</u> and provide a written ion to N
- c. Upon completion of the report, a pay of the Massachusetts Registered Design Professional's report shall be provided to the BBRS.
- the pro cam which ensures the Certified MBIC will have the d. Describe the p knowledge to the pro her product installation. The program training shall ly complet include provision which mal e clear hat the *Certified MBIC* shall be fully responsible ent and connection of the product in accordance with for th and proper placen IR IN R3 and the specialized codes. The Certified MBIC responsibilities shall ng the structure weather tight through the completion of the set. The shall remain present on site for installation of all the structural connections the envelope of the structure is in a weather tight state. Organizational ions for field repair and disposal of rejects.
- Permission for Inspection. The manufacturer shall provide the *Office* with written permission, signed and notarized, for the *Office* to inspect manufacturing facilities, products, and building sites under his or her control at any reasonable time without prior announcement.
- 14. Shall contain detailed plans for inspections by the *Office* or the *TPIA*.

PART III—APPROVAL OF INSPECTION AGENCIES

110.R3.11 REQUIREMENTS FOR SUBMISSION

An *inspection agency* seeking approval shall submit a quadruplicate application to the BBRS which shall include the items listed in R3.11.

<u>110.R3.11.1 Articles of Incorporation</u>. The original Articles of Incorporation of the agency and all subsequent amendments thereto, as filed in the State of Incorporation.

- 110.R3.11.2 Bylaws. The bylaws of the organization, if any.
- <u>110.R3.11.3 Business Affiliations of Members</u>. The names, addresses and business affiliations of all members of the Board of Directors and of top management personnel.
- 110.R3.11.4 Stock. Individual interests representing more than 10% of the outstanding ownership reflecting the financial interest of the agency's Board of Directors and top management personnel. 110.R3.11.5 Certifications. Certification by the agency that.
 - 1. Its Board of Directors, as a body, and its technical personnel, as individuals, can exercise independence of judgment; and
 - 2. Its activities pursuant hereto will result in no financial benefit to the agency via stock ownership, or other financial interests in any producer, supplier or vendor of products involved, other than through standard published fees for services rendered.
- 110.R3.11.6 Experience of Directors. Names, years of experience, state in which professionally registered and other qualifications of the directors of inspection or evaluation programs.
- 10.R3.11.7 Experience of Employees. Names and years of experience of employees practicing in the following disciplines: architecture, structural engineering, mechanical engineering, electrical engineering, fire protection and other branches of engineering; the state in which each pregative days the service each performs.
- 110.R3.11.8 Organization Chart. An organization chart showing a magement and supervises persons including the number of graduate engineers and architects, and the names of all consulting engineers or architects, designating which are full-time and which are part time employees.
- 110.R3.11.9 Number and Location of Per nel. Number d location of ctory inspectors. supervisors, and other technicians, including valuator of fac y inspectors and the qualifications of each specialized group, including reco rk exper ce, livenses held and other pertinent up and ea expected to perform and the qualifications; description of types of vork each ch tech qualifications of each group and each te nician rform the work as
- 110.R3.11.10 Employees Training Program. An outline of the prining program, if any, of the agency to assure that all inspectors, evaluators and outline technicisms are properly trained to do each job assigned to them.
- 110.R3.11.11 Employee Supervision. As ortline of the general procedures for supervision of inspectors and evaluators, including checking and evaluation of their work.
- 110.R3.11.12 Non-employees Relationships. A pengineers, technicians and other personnel who will perform services for the organization but who are not employees of the organization, and the supervisory and other relationships which each will have to the agency.
- 110.R3.11.13 Roducts Valuated. Type of paradets, components, equipment, structures and other items which the organization has reduated, kated or inspected and the number of years of experience the organization has had with each and the type of codes, standards, specifications and requirements with respect to which the organization has had experience in providing evaluation, inspection or testing services, and be number of years experience with each.
- 110.R3.11.14 Loquency Carability. Description of the frequency with which the agency is capable of performing inspections or evaluations. The narrative shall confirm a qualified person inspecting all of the products during the parameters sembly and only approving the products which conform to 780 CMR. The description shall include procedures which have the *TPIA*, during production, inspecting all product components and the construction material once the installation of each building trades (i.e., framing, insulation, mechanical, electrical, plumbing, framing, fuel gas, etc.) is complete confirming that each complies with 780 CMR. Inspection procedures must also include corrective actions before *TPIA* approves an inspection.
- <u>110.R3.11.15</u> State approved in. List of the states in which the *inspection agency* is now approved to inspect or evaluate *manufactured buildings* or *manufactured building components* or parts thereof for compliance with *approved building systems*.

<u>110.R3.11.16 Attaching labels</u>. Procedures must include attesting that only a qualified inspector representing the *approved Inspection Agency* shall attach the *label* to the product following endorsement of all required inspections by the *TPIA*.

110R3.12 PROCEDURES FOR APPROVING INSPECTION AGENCIES

110.R3.12.1 Qualifications. Upon determination of the *State Enforcement Agencies*, the *Office* may approve an *inspection agency* which meets the requirements of the applicable *codes* and 110.R3 and which the *State Administrative Agency* finds otherwise qualified to perform the functions proposed to be delegated to them.

110.R3.12.2 Suitability of Application. Prior to a full evaluation of an application for approval, the *Office* shall determine whether such application is unsuitable for processing. In the event the application is found to be unsuitable for processing, the applicant shall be notified in writing of such unsuitability and the basis thereof within 30 days of the date the application is received by the *Office*. It such event, all but \$25.00 of the fee will be returned, and the rulings of unsuitability shall be without prejudice. Any subsequent submission shall be treated as a new application.

110.R3.12.3 Approvals. In the event of approval, the *Office* shall strifty an *instruction gency* y letter indicating such approval and stating specifically the functions which the applicant has been approved to perform. Such approval shall not constitute the adval delegation of such inactions.

110.R3.13 SUSPENSION AND REVOCATION

110.R3.13.1 Grounds. The BBRS may suspend or revoke in registration approval of any TPIA or certification of any manufacturer, inspection access if the approval was issued in error; was issued on the basis of incorrect information; was issued in violation of any of the applicable codes Codes or 780 CMR 110.R3; if the inspection agency violates as a the applicable Codes or 110.R3, an examination discloses that the entityagency failed to perform properly; or for such other cause as may be deemed sufficient by the Office State Enforcement Agency to warrant such action. It there is a violation of the specialized codes, the Office shall notify the authority having juris action.

110.R3.913.2 Notice. Procedures

110.R3.13.21. General If the BBRS suspends or revokes the registration approval of a TPIA an inspection agency, the TPIA inspect on agency shall be given notice in writing from the Office BBRS of the suspension or revocation with the reasons therefore set forth therein. Manufacturers being evaluated or inspected by such agencies and all local enforcement agencies within the Commonwealththis State shall also be notified in writing of such suspension or revocation. Such notices shall contain instructions to the manufacturer and to the local enforcement agency as to the procedures to be followed regarding product, manufactured wildings or no unfactured building components previously certified by the TPIA an agency whose approval has been suspended or revoked. If the BBRS suspends or revokes the certification of a manufacturer, the manufacturer shall be given notice in writing from the Office of the suspension or revocation with the reasons therefore set forth therein. Such notices shall contain instructions to the TPIA and to the local enforcement agency as to the procedures to be followed regarding product produced by the manufacturer whose certification has been suspended or revoked.

110.R3.9.313.2.2 Records. If an entity An inspection agency whose registration or certification approval has been suspended or revoked shall within 90 days of the suspension or revocation deliver to the custody of the OfficeBBRS the originals of all records required to be maintained during the course of its the inspection agency's operations pursuant to the applicable codes and 780 CMR 110.R3.

110.R3.9.4 Appeal. Any entity aggrieved by a revocation or suspension stemming from a violation of 780 CMR 110.R3 or any other section or provision of 780 CMR may appeal to the BBRS as allowed by 780 CMR 1.00: *Scope and Administration*. For appeals to specialized code requirements the authority having jurisdiction shall administer the appeal.

110.R3.13.2.3 Labels. An *inspection agency* for which *approval* has been suspended or revoked shall within 90 days of the suspension or revocation deliver to the custody of the BBRS all *labels* in the agency's possession, under its control, or for which it is responsible pursuant to the applicable *codes* and 780 CMR 1.

PART IV—APPEALS

110.R3.14 HEARINGS

All hearings shall comply with applicable sections of the applicable *codes* and Regulations thereof established for the purpose of appeal.